

# TH55XE Motherboard



- Supports the Intel Core i7 / i5 / i3 / Pentium Processors in the LGA1156 Package
- Intel H55 single chip architecture
- 7 Phases Power Design
- Support 4-DIMM DDR3-2000+(OC)/1800(OC)/1600/1333 up to 16G maximum capacity
- 100% X.D.C Japanese solid capacitor
- Integrated HDMI/DVI interface with HDCP Supporting all HD formats including 720P, 1080i, 1080P. (Required processors with Intel HD Graphics)
- CPU integrated Graphics performance tunable via BIOS
- BIOSTAR Dura-MAX Technology
- BIOSTAR G.P.U (Green Power Utility) Technology for Energy Saving
- BIOSTAR Toverclocker utility
- Optimized to deliver full windows 7 Experience

# TH55XE Specifcation

CPU SUPPORT	Intel® Core™ i7 LGA 1156 Processor Intel® Core™ i5 LGA 1156 Processor Intel® Core™ i3 LGA 1156 Processor Intel® Pentium® LGA 1156 Processor
MEMORY	Support Dual Channel DDR3 800/1066/1333/1600(OC)/1800(OC)/2000(OC) MHz 4 x DDR3 DIMM Memory Slot Max. Supports up to 16GB Memory
INTEGRATED VIDEO	By CPU model
STORAGE	5 x SATA II Connector 1 x IDE Connector

LAN	Realtek RTL8111DL - 10/100/1000 Controller
AUDIO CODEC	Realtek ALC888 8+2 Channel HD Audio
USB	4 x USB 2.0 Port 3 x USB 2.0 Header
EXPANSION SLOT	1 x PCI-E 2.0 x16 Slot 1 x PCI-E 2.0 x4 Slot 2 x PCI Slot
REAR I/O	1 x PS/2 Mouse 1 x PS/2 Keyboard 1 x eSATA2 Connector 1 x FireWire IEEE 1394a Port 4 x USB 2.0 Port 1 x HDMI Connector 1 x DVI Connector 1 x VGA Port 1 x LAN Port 6 x Audio Jacks 1 x S/PDIF Out Port
INTERNAL I/O	3 x USB 2.0 Header 5 x SATA II Connector (3Gb/s) 1 x IDE Connector 1 x Front Audio Header 1 x Front Panel Header 1 x CPU Fan Connector 2 x System Fan Connector 1 x FireWire IEEE 1394 Header 1 x CIR Header 1 x COM Port Header 1 x Printer Port Header
DIMENSION	Micro ATX Form Factor Dimension: 24.4 cm X 24.4 cm ( W x L )
OS SUPPORT	Supports Windows XP / Vista / 7
BUNDLE SOFTWARE	BIO-Remote
ACCESSORIES	3 x SATA Cable 1 x SATA Power Cable 1 x I/O Shield 1 x Fully Setup Driver CD 1 x User Manual

#### **FEATURES**

Supports GT60
Windows 7 Compatible
Supports 100% Solid capacitor
Tweak Tech
Supports Clean-Tone
Supports O.N.E
Supports Rapid Switch
Supports Rapid Debug
BIO-FLASHER
Supports Toverclcoker OC software
Supports GPU

# TH55XE OVERVIEW

# **CPU-Chipset**



# Intel H55 chipset

The Intel H55 Chipset includes the FDI (Flexible Display Interface) which enables direct connection between the CPU and the graphics core. This allows the display information to be sent back to the H55 chipset for output.

The graphics core inside the Clarkdale processor is known as GMA HD. Its difference from the G45 GMA X4500HD is in the number of Unified shaders which was increased from 10 to 12.



# Intel LGA 1156 Core™ i7/Core™ i5 Processor support

Lynnfield is the first family of Intel 45nm CPU processors that uses the Intel Nehalem micro architecture in LGA1156 package. It is supported by Intel® DMI Interconnect and integrated with the Dual-channel memory controller with 4 DIMM slots DDR3 memory. It supports the Intel Turbo boost technology and smart cache.

# Audio+



# S/P DIF Output on board

Onboard Optical & Coaxial connector supports your desktop in transferring the non-distortion digital audio output to the AV amplifier and professional speaker system.

# Speed+











#### **GT60**

Biostar GT60 is a unique OC method that enables users to adjust onboard GPU clock and voltage. GT60's innovative design with flexible adjustment can enhance system gaming performance by up to 60%.

#### eSATA

One or Two external SATA 3Gb/s ports connectivity with minimal host overhead and host to device latency.

## IEEE1394 on board

IEEE 1394a is a serial bus interface for high-speed communication and data transfer. Major applications are in desktop, digital video/audio and other portable devices.

## **T-Overclocker**

T-overclocker presents a simple Windows-based system performance enhancement and utility management. It features several powerful yet easy to use tools such as overclocking for system performance enhancement, CPU and memory special enhancement, a smart-fan control for managing fan speed control of both CPU cooling fan, north-bridge chipset cooling fan, PC health for monitoring system status, and pre-set OC modes for easy OC.

# Tweak Tech

Biostar has a unique engineering PWM layout with low ESR and high ripple conductive solid state caps that provide sufficient, stable power supply to the CPU. The same philosophy applies to our DDR design to enhance the memory's voltage stability.



#### **Dual Channel DDR3**

It supports 2 or 4 DIMM Slots DDR3 memory that features data transfer rates of DDR3 2000(O.C.)/1800(O.C.)/1600/1333. The processor support 2 memory channels and setting the memory multiplier, allows selection of the channel speed. These clearly uplift the band width and boost the overall system performance.

# Durable+



# 7 Phase Power Phase Design

7-phase VRM design with high quality power components such as low RDS (on) Mosfet for lower temperature has the advantage to raise the overclocking ability.



IR Direct FET



**Ferrite Choke** 



100%X.D.C

#### **Dura-MAX**

BIOSTAR Dura-MAX™ is created for the highest quality and most innovative of all motherboard designs. It is a pioneering design that innovates IR DirectFET™ MOSFET, delivering a dramatically lower system temperature, improved energy efficiency and enhanced stability for overclocking needs. Also, it is combined with Japanese solid capacitors and Ferrite core chokes with higher power switching efficiency. Tpower i55 motherboards with Dura-MAX™ guarantee stability, reliability and durability in meeting the motherboard power requirements of new Intel processors and other components that run today's most demanding applications and games.



# G.P.U (Green Power Utility)

BIOSTAR G.P.U (Green Power Utility) is a new function that enhances energy efficiency by disabling extra phases while CPU is under light loading. It integrates a friendly GUI to monitor the resourcing and response of your CPU thus optimizing the power saving function in your system. G.P.U. constantly sets up the best power efficiency in your system, be it for heavy 3D gaming, Internet or MSN charting.



### G.P.U. Power Indicator LED

LED display indicates real-time power saving.





# **MX SUITE**

As an Biostar customer you can download MAGIX multimedia tools designed to enhance your music, videos and photos for free. From music and website creation to video editing and photo management. Four products that cover all of your multimedia needs. Simply do more with your media than you ever thought possible.



# **Simplitec**

"Simplitec" offers premium solutions to ensure your PC is faster, more reliable and free of security gaps - automatically or with customized setups. "Simplitec" is a free bundle software to scan your computer for problems and offers a professional solution for each problem to put your PC back in top form.



# BIO-V(BIOSTAR Voltage Point)

This reads voltages from the RAM, chipset, PCI-E, CPU, QPI and CPU PII's directly.



# O.M.G (OverClocking Matrix Genie)

O.M.G (Overclocking Matrix Genie) is designed to automatically adjust key items to maximize system performance. Just press F10 when booting. This allows you to make simple overclocking steps as an OC expert. It lets you adjust the CPU clock, CPU voltage and other key items for overclocking needs.



#### **BIO-Flasher**

BIO-Flasher is a convenient BIOS update tool. Just launch this tool and put the BIOS on USB pen driver before entering the OS. You can update your BIOS with only a few clicks without preparing an additional floppy disk or other complicated flash utility.



#### **BIO-ReLife**

BIO-ReLife Technology lets you recover crashed BIOS data from a USB flash pen driver that stores new BIOS file. This practical BIOS utility can restore your system and recover from a BIOS crash situation.



# Rapid Switch

No more meddling with the power and reset jumpers onboard. The power and reset buttons are already built onboard. It is convenient for DIY users to test the board without short-circuiting the wrong pins.



# Rapid Debug

There is no need to check any H/W installation error. Onboard LED indicator answers the question for the user.

\*The specification and pictures are subject to change without notice and the package contents may differ by area or your motherboard version!